



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

0

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,376	03/30/2001	George H. Butcher III	7056.014	5338
45599	7590	11/30/2005		
EXAMINER				
BORLINGHAUS, JASON M				
ART UNIT		PAPER NUMBER		
		3628		

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/823,376	BUTCHER, GEORGE H.	
	Examiner	Art Unit	
	Jason M. Borlinghaus	3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 9/16/05.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 15 and 17-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 15 and 17-33 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Claim Objections

Claim 28 is objected to because of the following informalities: extra word. Claim 28 (line 2) states "...the group including consisting of..." Examiner believes that applicant meant to delete the word "including" and replace it with the word "consisting". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 15, 19, 22 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Livingston (Livingston, Miles. *Bonds & Derivatives*. Blackwell Publishers. Malden, Massachusetts. 1999. pp. 25 – 26), Financial Post (Canadian

market benefits less from CPI news. Financial Post. June 15, 2000. p. 2), Bella (Bella, Rick. Sewer Rates Likely To Rise. The Oregonian. Portland, Oregon (July 17, 2000) p. E02) and Miller (Miller, Gerald J. Handbook of Debt Management. Marcel Dekker. 1996. p. 260 & 418).

Regarding Claim 15, Livingston discloses a method comprising:

- a bond (revenue bond) issued by a bond issuer (municipality), wherein the bond (revenue bond) has associated therewith a repayment obligation and an underlying revenue stream (revenue stream generated by revenue bond funded project). (see pp. 25 – 26); and
- possible failure of the revenue stream to cover the requirements of the repayment obligations. (see p. 26 – establishing the possibility that the revenue stream might not cover the requirements of the repayment obligation).

Livingston does not teach method implemented by a programmed computer system for use in connection with a bond issued by a bond issuer, wherein the bond has associated therewith a repayment obligation and an underlying revenue stream, comprising:

- inputting data regarding an expected payment date for the bond;
- inputting data regarding a legal maturity date for the bond;
- inputting data regarding a requirement that the bond issuer establish revenue rates sufficient to pay the repayment obligation by the expected payment date;

Art Unit: 3628

- inputting data regarding the underlying revenue stream associated with the bond;
- determining based at least upon the input data regarding the expected payment date and the input data regarding the underlying revenue stream, if the repayment obligation will be met by the expected payment date;
- meeting the repayment obligation by the expected payment date to the extent that the determining step determines that the repayment obligation will be met by the expected payment date; and
- deferring the payment of the repayment obligation as late as the legal maturity date to the extent that the repayment obligation is not met by the expected payment date due to the failure of the revenue stream to cover the requirements of the repayment obligations wherein the deferral is based at least in part upon the input data regarding the legal maturity date and the input data regarding the underlying revenue stream.

Financial Post discloses a method wherein the bond comprises:

- an expected payment date (June 2003). (see p. 2);
- a legal maturity date (June 2030). (see p. 2); and
- deferring the payment of the repayment obligation as late as the legal maturity date (June 2030) to the extent that the repayment obligation is not met by the expected maturity date (June 2003). (see p. 2).

Bella discloses a method wherein:

- a requirement that the bond issuer (city) establish revenue rates (sewer rates) sufficient to pay the repayment obligation by the expected payment date. (see p. E02 – establishing the requirement that the bond issuer establish sufficient revenue rates sufficient to repay the revenue bonds).

Miller discloses a method comprising:

- data regarding an expected payment date (duration of the bond issue) for the bond. (see Debt Servicing, p. 418);
- data regarding the underlying revenue stream (revenue flows) associated with the bond. (see Debt Servicing, p. 418); and
- determining (forecasting) based at least upon the input data regarding the expected payment date (duration of bond issue) and the input data regarding the underlying revenue stream (revenue flows), if the repayment obligation will be met by the expected payment date (whether debt-servicing needs will exceed the revenues available). (see Debt Servicing, p. 418).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston by incorporating the ability to defer bond repayment to a second repayment date, as disclosed by Financial Post, to minimize the potential for default of the bond issuer at the first repayment date and, thereby, make the bond a lower-risk investment and more attractive to investors.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston and Financial Post by incorporating the

requirement that the bond issuer establish revenue rates sufficient to repay the bond, as disclosed by Bella, to ensure, that despite the existence of a second repayment date, that the bond issuer makes all due attempt to repay the bond by the first repayment date.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post and Bella by meeting the repayment obligation by the first repayment date, as disclosed by Financial Post, by the extent that the repayment obligation can be met, such as through revenue generated by revenue bond funded project, as disclosed by Livingston, and to the defer complete repayment to a second repayment date, as disclosed by Financial Post, if the revenue stream is insufficient to meet repayment obligations, such as through insufficient revenue generated by the revenue bond funded project as disclosed by Livingston. The deferral of repayment obligations to a second repayment date to the extent that the repayment obligations cannot be met by the first repayment date would serve to minimize the potential for default of the bond issuer at the first repayment date and, thereby, make the bond a lower-risk investment and more attractive to investors.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post and Bella by incorporating a determining and analysis step to determine whether the revenue stream generated would be sufficient to meet repayment obligations, as disclosed by Miller, as such determining and analysis would allow bond issuer to determine and plan the extent

that which the repayment of the bond would need to be deferred to a second repayment date.

Neither Livingston, Financial Post, Bella nor Miller teach that the determining, analysis, calculation, inputting nor consideration of bond factors is automatic. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have automated the method, since it has been held that broadly providing a mechanical or automatic means to replace manual activity that accomplishes the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.

Regarding Claim 19, Livingston discloses a method wherein:

- bond is repaid from revenue generated by bond-funded project. (see p. 26).

Livingston does not teach a method wherein:

- the requirement that the bond issuer establish revenue rates sufficient to pay the repayment obligation by the expected payment date further comprises the requirement that the bond issuer establish revenue rates sufficient to pay both the repayment obligation by the expected payment date and legally payable debt service.

Bella discloses a method wherein:

- the requirement that the bond issuer (city) establishes revenue rates (sewer rates) sufficient to pay the repayment obligation by the expected payment date further comprises the requirement that the bond issuer (city) establish revenue rates (sewer rates) sufficient to pay both the repayment

obligation by the expected payment date and legally payable debt service. (see p. E02 – establishing that revenue rates are to be established at a level sufficient to repay bond obligations).

Miller discloses a method wherein:

- Debt servicing requires bond issuer has sufficient revenue to pay both the repayment obligation by the expected payment date (principal) and legally payable debt service (coupon interest). (see Debt Servicing, p. 418).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella and Miller by incorporating the requirement that the bond issuer establish revenue rates sufficient to repay the bond, as disclosed by Bella, including the repayment obligation and payable debt service, as disclosed by Miller, to ensure, that despite the existence of a second repayment date, that the bond issuer makes all due attempt to repay the all repayment obligations by the first repayment date.

Regarding Claim 22, Livingston discloses a method wherein:

- bond is repaid from revenue generated by bond-funded project. (see p. 26).

Livingston does not teach a method wherein:

- the step of requirement that the bond issuer establish revenue rates sufficient to pay the repayment obligation by the expected payment date is a continuing requirement even if the repayment obligation is deferred.

Financial Post discloses a method wherein:

Art Unit: 3628

- the step of requiring the bond issuer to pay the obligation by the expected payment date (June 2003) is a continuing requirement even if the repayment obligation is deferred (until June 2030). ("Telus Communications (BC) Inc. priced an extendible, \$200-million bond with a 6.4% coupon to mature in June, 2003. The bond is extendible to June, 2030 with a 7.25% coupon." – see p. 02).

Bella discloses a method wherein:

- a requirement that the bond issuer (city) establish revenue rates (sewer rates) sufficient to pay the repayment obligation by the expected payment date. (see p. E02 – establishing the requirement that the bond issuer establish sufficient revenue rates sufficient to repay the revenue bonds).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella and Miller by incorporating the requirement that the bond issuer establish revenue rates sufficient to repay the bond, as disclosed by Bella, to ensure, that despite the existence of a second repayment date, that the bond issuer makes all due attempt to repay the bond by the first repayment date and to continue such a requirement to further ensure that the bond issuer can meet repayment obligations by the second repayment date, if utilized.

Regarding Claim 33, Livingston discloses a method wherein:

- the revenue is a net revenue stream. (see pp. 25 – 26. It would be inherent in a revenue bond that the revenue stream used to repay the bond would be a net revenue stream (revenue after expenses). Otherwise,

a project would be required to repay the bonds while operating at a loss which would endanger the bond-funded project and would be counter-productive to securing the bond in the first place.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella and Miller by incorporating a limitation that the revenue stream utilized for repayment of the revenue bond to a net revenue stream, as is inherent in Livingston, to prevent the repayment of the revenue bond from the pre-expense revenue which could possibly endanger the bond-funded project.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Livingston, Financial Post, Bella, and Miller, as in Claim 15 above, and in further view of Merriam-Webster (*Merriam-Webster's Collegiate Dictionary: 10th Edition*, Massachusetts, Merriam-Webster, 1997, p. 455).

Livingston discloses a method wherein:

- there is a possibility of the failure of the revenue stream to cover the requirements of the repayment obligation. (see p. 26 – establishing that the project's revenue stream is used to cover the repayment obligation and that the revenue stream may fail to cover the repayment obligation, as is evidenced by the bond's higher risk nature.)

Neither Livingston, Financial Post, Bella nor Miller teach a method wherein:

- the failure of the revenue stream to cover the requirements of the repayment obligation results from a force majeure event.

Merriam-Webster discloses a method wherein:

- an event is a force majeure event. ("an event or effect cannot be reasonably anticipated or controlled." – p. 455).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella and Miller by incorporating the limitation that the bond-funded project's inability to generate revenue to meet the repayment obligation to a force majeure event, as defined by Merriam-Webster, to prevent the possibility of fraud by the bond issuer.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Livingston, Financial Post, Bella, and Miller, as in Claim 15 above, and in further view of O'Shaughnessy (O'Shaughnessy, Lynn. *The Unofficial Guide to Investing*, New York, Macmillan General Reference, 1999, p. 152).

Livingston discloses a method wherein:

- the revenue stream flows from a project. (see p. 26).

Neither Livingston, Financial Post nor Miller teach a method wherein:

- the revenue stream flows from a project selected from the group including:
 - i) an airport project; and ii) a sewer project.

Bella discloses a method wherein:

- the revenue stream flows from a project selected from the group consisting of: (ii) a sewer project. (see p. E02).

O'Shaughnessy discloses a method wherein:

- a project selected from the group including: i) an airport project; and ii) a sewer project. ("State and local governments issue municipal bonds to build such things as sewage systems, airports, bridges, hospitals, prisons, highways, and other high-ticket items." – see p. 152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella and Miller by incorporating the utilization of the revenue bond to fund the construction of an airport, as disclosed by O'Shaugnessy, and a sewer system, as disclosed by Bella and O'Shaugnessy, since both projects are typically funded by such bonds.

Claims 20 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Livingston, Financial Post, Bella, Miller and O'Shaughnessy, as in Claim 19 above, and in further view of Ainger (Ainger, Will. *XL Capital Preps Cat Bond Debut, Insurance Finance & Investment*. v. 4, n. 11. May 31, 1999. p. 1).

Livingston discloses a method wherein:

- there may be the existence of a predetermined shortfall i) the sum of the repayment obligation and legally payable debt service and ii) revenues raised. (see p. 26 – establishing the possibility that the revenue stream might not cover the requirements of the repayment obligation).

Neither Livingston, Miller nor O'Shaughnessy teach a method wherein:

- the deferral of the payment of the repayment obligation occurs upon the occurrence of an objectively determinable event; and
- the objectively determinable event is the existence of a predetermined shortfall between: i) the sum of the repayment obligation and legally payable debt service and ii) revenues raised by the revenue rates established by the bond issuer.

Financial Post discloses a method wherein:

- the deferral (until 2030) of the payment of the repayment obligation occurs. (see p. 02); and
- requiring that the repayment obligation be met by the final maturity date (June 2030) to the extent that the repayment obligation is not met by the expected maturity date (June 2003). (see p.02).

Bella discloses a method wherein:

- revenues are raised by revenue rates established by the bond issuer. (see p. E02).

Ainger discloses a method wherein:

- the deferral of the payment of the repayment obligation occurs upon the occurrence of an objectively determinable and predetermined event ("If the damage claims from each such an event reach a predetermined level within the first three years of the bond's life, coverage will extend for a further three years." – see page 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella, Miller and O'Shaughnessy by incorporating an objectively determinable and predetermined event, as disclosed by Ainger, to the foreseeable shortfall between the repayment obligation and the revenue raised, as disclosed by Livingston and Bella, to clearly define the situation in which a bond extension may occur, as disclosed by Financial Post, allowing investors to gauge the likelihood of the pre-defined event and, in turn, the likelihood of the bond extension.

Claims 23 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Livingston, Financial Post, Bella and Miller, as in Claim 15 above, and in further view of Brigham (Brigham, Eugene F., Gapenski, Louis C. & Daves, Phillip R. *Intermediate Financial Management 6th Edition*. Dryden Press, 1999. p.392).

Neither Financial Post, Livingston nor Miller teach a method wherein:

- the requirement that the bond issuer establish revenue rates sufficient to pay the repayment obligation by the expected payment date further comprises establishing a revenue requirement based on a lower coverage ratio than is used for purposes of either a board policy associated with the bond or a rate covenant associated with the bond; and
- the coverage ratio is greater than 1.

Bella discloses a method wherein:

- the requirement that the bond issuer establish revenue rates sufficient to pay the repayment obligation by the expected payment. (see p. E02).

Brigham discloses a method wherein:

- the step of establishing coverage ratios. ("Coverage ratios, which were discussed in detail in Chapter 3, often are used by lenders and rating agencies to measure the risk of financial distress." – see p. 392).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella and Miller by incorporating revenue rates sufficient to cover the repayment obligations, as established by Bella, to ensure, that despite the existence of a second repayment date, that the bond issuer makes all due attempt to repay the bond by the first repayment date.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella and Miller by incorporating a coverage ratio, as disclosed by Brigham, to create an objective criteria by which to gauge the sufficiency of the established revenue rate to meet the repayment obligation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella, Miller and Brigham to have allowed for any coverage ratio that the inventor desired.

Claims 25 – 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Livingston, Financial Post, Bella and Miller, as in Claim 15 above, and in further view of

Shinn (Shinn, Paul. *Bond Banks and Revolving Loan Funds. Government Finance Review*. Chicago, Illinois. vol. 4, iss. 3. June 1988. pp. 36 – 37).

Neither Livingston, Financial Post, Bella nor Miller teach a method wherein:

- the bond is issued as part of a pool of bonds; and
- the pool of bonds is associated with a state revolving fund program.

Shinn discloses a method wherein:

- the bond is issued as part of a pool of bonds. ("Several small issues are pooled into one large issue that can be sold on the national market." – see abstract); and
- the pool of bonds is associated with a state revolving fund program ("Revolving loan funds are intended to be self-supporting and differ from bond banks in several ways, including: 1. Funds are recycled...Many states combine revolving loan funds with other financing techniques for more flexibility." – see abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella and Miller by incorporating a pool of bonds and a state revolving fund program, as disclosed by Shinn, to provide a bond issuer with greater financing flexibility.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Livingston, Financial Post, Bella and Miller, as in Claim 15 above, and in further view of

Reckard (Reckard, E. Scott. *Holders of county's bond vote to extend maturities. The Fresno Bee*. Fresno, California. July 8, 1995. p. A4.)

Neither Livingston, Financial Post, Bella and Miller teach a method wherein:

- additional interest on a principal portion of the repayment obligation which is not met by the expected payment date continues to accrue until the principal portion of the repayment obligation is met.

Reckard discloses a method wherein:

- additional interest on a principal portion of the repayment obligation which is not met by the expected payment date continues to accrue until the principal portion of the repayment obligation is met. ("Postponing the deadline will add \$10 million in interest and penalties to the final tab, but the extra time to make the debt is worth it." – see p. 4 - It is inherent that interest would continue to accrue on the principal portion not paid until the repayment obligation was met.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella and Miller by incorporating the concept that interest would continue to accrue on the unpaid principal until it was paid, as disclosed by Reckard, to prevent the bond issuer from obtaining any unjust enrichment from its inability to repay its debt obligations.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Livingston, Financial Post, Bella, Miller and Reckard, as in Claim 27 above, and in

Art Unit: 3628

further view of Rowen (Rowen, Hobart. *Debt Relief Gets a Cautious Nod. The Washington Post.* October 8, 1987. p. A23).

Neither Livingston, Financial Post, Bella, Miller nor Reckard teach a method wherein:

- the additional interest is paid using a mechanism selected from the group consisting of (i) accretion of principal to the principal portion of the obligation in the amount of the unpaid additional interest.

Rowen discloses a method wherein:

- the additional interest is paid using a mechanism selected from the group consisting of (i) accretion of principal to the principal portion of the obligation in the amount of the unpaid additional interest (interest capitalization). ("Last week, he broadened the menu to include a cautious endorsement of 'voluntary interest capitalization' for selected small debtor countries. They would be allowed to add interest payments onto the loan capital itself. Banks don't like interest capitalization because it takes current interest payments off their balance sheets" – see p. A23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella, Miller and Reckard by incorporating the ability to capitalize interest, as disclosed by Rowen, to provide a bond issuer with greater financing flexibility.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Livingston, Financial Post, Bella, Miller, Reckard and Rowen, as in Claim 28 above, and in further view of Flaum (Flaum, David. *New types of bonds hold some twists. Orange County Register*. Santa Ana, California. October 3, 1988. p. C1).

Neither Livingston, Financial Post, Bella, Miller, Reckard nor Rowen teach a method wherein:

- the increase in the interest rate on any unpaid part of the principal portion of the repayment obligation increases in each year following the expected payment date.

Flaum discloses a method wherein:

- the increase in the interest rate on any unpaid part of the principal portion of the repayment obligation increases in each year following the expected payment date. ("The extendible feature gives the issuer flexibility, especially if the rate is 'resettable' at the time the company or municipality issuing them decides whether to extend the maturity". – see p. c1. "After the rate is reset for the first time, subsequent resettable dates usually come up every year." – see p. c12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella, Miller, Reckard and Rowen's by incorporating the ability to increase the interest rate every year after its expected payment date, as disclosed by Flaum, to provide a bond issuer with greater financing flexibility.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Livingston, Financial Post, Bella, Miller, as in Claim 15 above, and in further view of Reckard and Downes (Downes, John. *Barron's Finance & Investment Handbook. 2nd Edition. Barron's Educational Series.* Hauppauge, New York. 1987. p. 215).

Neither Livingston, Financial Post, Bella nor Miller teach a method wherein:

- additional interest on an interest portion of the repayment obligation which is not met by the expected maturity date continues to accrue until the interest portion of the repayment obligation is met.

Reckard discloses a method wherein:

- additional interest on a principal portion of the repayment obligation which is not met by the expected maturity date continues to accrue until the principal portion of the repayment obligation is met. ("Postponing the deadline will add \$10 million in interest and penalties to the final tab, but the extra time to make the debt is worth it." – see p. 4 - It is inherent that interest would continue to accrue on the principal portion not paid until the repayment obligation was met.)

Downes discloses a method wherein:

- additional interest on an interest portion of the repayment obligation continues to accrue. ("Compound interest [is] interest earned on principal plus interest that was earned earlier." – see p. 215).

Art Unit: 3628

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella and Miller by incorporating the concept that interest would compound itself, as disclosed Downes, in the same manner as interest accrued to the principal, as disclosed by Reckard, to prevent the bond issuer from obtaining any unjust enrichment from its inability to repay its debt obligations.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Financial Post, Livingston, Bella, Reckard and Downes, as in Claim 30 above, and in further view of Rowen.

Neither Livingston, Financial Post, Bella, Miller, Reckard nor Downes teach a method wherein:

- the additional interest is paid using a mechanism selected from the group consisting of (i) accretion of principal to the principal portion of the obligation in the amount of the unpaid additional interest.

Rowen discloses a method wherein:

- the additional interest is paid using a mechanism selected from the group consisting of (i) accretion of principal to the principal portion of the obligation in the amount of the unpaid additional interest (interest capitalization). ("Last week, he broadened the menu to include a cautious endorsement of 'voluntary interest capitalization' for selected small debtor countries. They would be allowed to add interest payments onto the loan

capital itself. Banks don't like interest capitalization because it takes current interest payments off their balance sheets" – see p. A23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella, Miller, Reckard and Downes by incorporating the ability to capitalize compound interest, as disclosed by Rowen, to provide a bond issuer with greater financing flexibility.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Livingston, Financial Post, Bella, Miller, Reckard, Downes and Rowen, as in Claim 31 above, and in further view of Flaum.

Neither Livingston, Financial Post, Bella, Miller, Reckard nor Rowen teach a method wherein:

- the increase in the interest rate on any unpaid part of the principal portion of the repayment obligation increases in each year following the expected maturity date.

Flaum discloses a method wherein:

- the increase in the interest rate on any unpaid part of the principal portion of the repayment obligation increases in each year following the expected maturity date. ("The extendible feature gives the issuer flexibility, especially if the rate is 'resettable' at the time the company or municipality issuing them decides whether to extend the maturity". – see p. c1. "After

the rate is reset for the first time, subsequent resettable dates usually come up every year." – see p. c12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Livingston, Financial Post, Bella, Miller, Reckard, Downes and Rowen by incorporating the ability to increase the interest rate every year after its expected maturity date, as disclosed by Flaum, to provide a bond issuer with greater financing flexibility.

Response to Arguments

Applicant's arguments filed 9/16/05 have been fully considered but they are not persuasive.

Applicant argues there appears to be no teaching or suggestion to tie the various references (Financial Post, Livingston and Bella) together. Examiner disagrees.

First, applicant further argues that two references are "financial-related articles" and one reference "appears to be a treatise on bonds and bond derivatives." Examiner disagrees. All three references discuss bonds – date-extendible bonds (Financial Post) and revenue bonds (Livingston and Bella).

Second, applicant argues that the "applicant does not suggest that the invention is for a specific financial element (e.g. a revenue bond)." Examiner disagrees. Applicant claims a "bond associated therewith a repayment obligation" (original Claim 15) and "the bond has an underlying revenue stream associated therewith" (Claim 16). A revenue bond is a bond associated therewith a repayment obligation (revenue bond has an

associated repayment obligation) and that has an underlying revenue stream associated therewith (revenue stream associated with the project funded by revenue bond is utilized to repay the bond). (see Livingston, see pp. 25 – 26).

Third, applicant argues that the references do not establish “requiring the bond issuer establish revenue rates sufficient to pay the repayment obligation by the expected payment date.” (see original Claim 15). Examiner disagrees. A revenue bond, by its nature, can only be paid back with revenues generated by the project funded by the revenue bonds. (see Livingston, p. 26). Therefore, sufficient revenue must be generated by the project in order to repay the revenue bond as no outside-project funds can be used. In Bella, the bond issuer (city) via consultants realizes that the bond issuer (city) must establish revenue rates (sewer rates) sufficient to pay the repayment obligation. (“...the city needs the additional revenue from a rate increase to pay off revenue bonds sold last year to finance sewer system improvements.” – see Bella, p. E02). While the bond issuer in Bella debates how fast or how gradually to raise the rates, the bond issuer must still generate sufficient revenue to repay the revenue bonds by the expected payment date, as outside funds are excluded from use, and, therefore, is required to set a revenue rate sufficient to generate sufficient revenue by said date. If insufficient funds were generated by the project to repay the revenue bonds by the expected payment date, the bond issuer would be in default, as is the nature of bonds and repayment obligations. Therefore, the bond issuer is required to set revenue rates sufficient to pay the repayment obligation or risk default.

Furthermore, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Livingston discusses the general nature of revenue bonds - limiting funds utilized for repayment of the revenue bonds to the funds generated by the project funded by the revenue bonds. (see Livingston, pp. 25 – 26). Bella discusses the bond issuer (city) structuring the establishment of revenue rates (sewer rates) sufficient to allow repayment of the revenue bonds. (see Bella, p. E02). However, due to the limitations on the source of funds for repayment of revenue bonds, there is always the possibility, despite the best efforts of all parties involved, that insufficient funds will be generated by the project and the bond issuer will, therefore, default on said revenue bonds. It is old and well-known in the art that such a risk of default is why such bonds are considered "higher-risk and carry higher yields than general obligation bonds." (see Livingston, p. 26). Financial Post disclosed an extendible bond in which the expected payment date of the bond may be extended outwards from a first expected payment date to a second payment date. (see Financial Post, p. 2). As a bond-issuer may default on revenue bonds, despite their best efforts at repayment, and may wish to lower the risk associated with their bonds, thereby attracting more investors, it would have been

obvious for the bond-issuer to incorporate the characteristics of an extendible bond to minimize said risk of default. Under such a combination, the revenue bond expected repayment date would be extendible from a first repayment date (expected repayment date) outwards to a second repayment date (legal maturity date) should the bond issuer be unable to generate sufficient revenue to repay the revenue bonds at the first repayment date (expected repayment date).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Borlinghaus whose telephone number is (571) 272-6924. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HYUNG SOUGH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600